

SEQUENCE LISTING

<110> Mahajan, Muktar A
Samuels, Herbert H

<120> NIF-1 IS A NOVEL CO-TRANSDUCER THAT INTERACTS WITH AND
REGULATES THE ACTIVITY OF THE NUCLEAR HORMONE RECEPTOR
CO-ACTIVATOR, NRC

<130> 57953/1151

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<150> 60/405,752

<151> 2002-08-23

<160> 14

<170> PatentIn Ver. 2.1

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 Leu Thr His Ile Gln Ala Val Ala Asn Arg Arg Phe Lys Cys Glu Phe
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 Cys Glu Phe Val Cys Glu Asp Lys Lys Ala Leu Leu Asn His Gln Leu
 115 120 125
 Ser His Val Ser Asp Lys Pro Phe Lys Cys Ser Phe Cys Pro Tyr Arg
 130 135 140
 Thr Phe Arg Glu Asp Phe Leu Leu Ser His Val Ala Val Lys His Thr
 145 150 155 160
 Gly Ala Lys Pro Phe Ala Cys Glu Tyr Cys His Phe Ser Thr Arg His
 165 170 175
 Lys Lys Asn Leu Arg Leu His Val Arg Cys Arg His Ala Asn Ser Phe
 180 185 190

Glu Glu Trp Gly Arg Arg His Pro Glu Glu Pro Pro Ser Arg Arg Arg
 195 200 205
 Pro Ile Phe Ser Leu Gln Gln Ile Glu Lys Leu Lys Gln Gln His Ser
 210 215 220
 Ala Ala Pro Gly Pro Pro Leu Ser Ser Ala Gly Pro Glu Ala Pro Gln
 225 230 235 240
 Glu Pro Ala Pro Phe Gln Ser Pro Glu Thr Pro Pro Leu Leu Cys Pro
 245 250 255
 Asp Ala Leu Gly Gly Ala Thr Ile Ile Tyr Gln Gln Gly Ala Glu Glu
 260 265 270
 Ser Thr Ala Met Ala Thr Gln Thr Ala Leu Asp Leu Leu Leu Asn Met
 275 280 285
 Ser Ala Gln Arg Glu Leu Gly Ala Thr Ala Leu Gln Val Ala Val Val
 290 295 300
 Lys Ser Glu Asp Val Glu Ala Glu Leu Thr Ser Thr Ala Arg Gln Pro
 305 310 315 320
 Ser Ser Glu Asp Thr Thr Pro Arg Val Val Thr Leu His Val Ala Glu
 325 330 335
 Ser Gly Ser Ser Val Ala Ala Glu Ser Gln Leu Gly Pro Ser Asp Leu
 340 345 350
 Gln Gln Ile Ala Leu Pro Pro Gly Pro Phe Ser Gly Ala Ser Tyr Ser
 355 360 365
 Val Ile Thr Ala Pro Pro Val Glu Gly Arg Ala Ser Ala Ser Gly Pro
 370 375 380
 Pro Tyr Arg Glu Glu Pro Pro Gly Glu Ala Ala Gln Ala Val Val Val
 385 390 395 400
 Asn Asp Thr Leu Lys Glu Ala Gly Thr His Tyr Ile Met Ala Ala Asp
 405 410 415
 Gly Thr Gln Leu His His Ile Glu Leu Thr Ala Asp Gly Ser Ile Ser
 420 425 430
 Phe Pro Ser Pro Asp Thr Leu Ala Pro Gly Thr Lys Trp Pro Leu Leu
 435 440 445

Gln Cys Gly Gly Pro Pro Arg Asp Gly Pro Glu Val Leu Ser Pro Thr
 450 455 460

Lys Thr His His Thr Gly Gly Ser Gln Gly Ser Ser Thr Pro Pro Pro
 465 470 475 480

Ala Thr Ser His Ala Leu Gly Leu Leu Val Pro His Ser Pro Pro Ser
 485 490 495

Ala Ala Ala Ser Ser Thr Lys Lys Phe Ser Cys Lys Val Cys Ser Glu
 500 505 510

Ala Phe Pro Ser Arg Ala Glu Met Glu Ser His Lys Arg Ala His Ala
 515 520 525

Gly Pro Ala Ala Phe Lys Cys Pro Asp Cys Pro Phe Ser Ala Arg Gln
 530 535 540

Trp Pro Glu Val Arg Ala His Met Ala Gln His Ser Ser Leu Arg Pro
 545 550 555 560

His Gln Cys Asn Gln Cys Ser Phe Ala Ser Lys Asn Lys Lys Asp Leu
 565 570 575

Arg Arg His Met Leu Thr His Thr Asn Glu Lys Pro Phe Ser Cys His
 580 585 590

Val Cys Gly Gln Arg Phe Asn Arg Asn Gly His Leu Lys Phe His Ile
 595 600 605

Gln Arg Leu His Ser Ile Asp Gly Arg Lys Thr Gly Thr Ser Thr Ala
 610 615 620

Arg Ala Pro Ala Gln Thr Ile Ile Leu Asn Ser Glu Glu Glu Thr Leu
 625 630 635 640

Ala Thr Leu His Thr Ala Phe Gln Ser Asn His Gly Thr Leu Gly Thr
 645 650 655

Glu Arg Leu Gln Gln Ala Leu Ser Gln Glu His Ile Ile Val Ala Gln
 660 665 670

Glu Gln Thr Val Ala Asn Gln Glu Glu Ala Thr Tyr Ile Gln Glu Ile
 675 680 685

Thr Ala Asp Gly Gln Thr Val Gln His Leu Val Thr Ser Asp Asn Gln
 690 695 700

Val Gln Tyr Ile Ile Ser Gln Asp Gly Val Gln His Leu Leu Pro Gln
 705 710 715 720
 Glu Tyr Val Val Val Pro Asp Gly His His Ile Gln Val Gln Glu Gly
 725 730 735
 Gln Ile Thr His Ile Gln Tyr Glu Gln Gly Thr Pro Phe Leu Gln Glu
 , 740 745 750
 Ser Gln Ile Gln Tyr Val Pro Val Ser Pro Ser Gln Gln Leu Val Thr
 755 760 765
 Gln Ala Gln Leu Glu Ala Ala Ala His Ser Ala Val Thr Val Ala Asp
 770 775 780
 Ala Ala Met Ala Gln Ala Gln Gly Leu Phe Gly Thr Glu Glu Ala Val
 785 790 795 800
 Pro Glu His Ile Gln Gln Leu Gln His Gln Gly Ile Glu Tyr Asp Val
 805 810 815
 Ile Thr Leu Ser Asp Asp
 820

<210> 9
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Peptide

<400> 9
 Leu Val Asn Leu Leu
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<210> 10
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Peptide

<400> 10

Ala Val Asn Ala Ala

1 5

<210> 11

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide

<400> 11

Leu Asp Leu Leu Leu

1 5

<210> 12

<211> 122

<212> PRT

<213> Human

<400> 12

Cys Asp Lys Cys Gly Lys Ser Phe Lys Lys Arg Tyr Thr Phe Lys Met

1 5 10 15

His Leu Leu Thr His Cys Glu Phe Val Cys Glu Asp Lys Lys Ala Leu

20 25 30

Leu Asn His Gln Leu Ser His Ala Thr Gln Thr Ala Leu Asp Leu Leu

35 40 45

Leu Asn Met Ser Ala Gln Arg Glu Leu Cys Lys Ile Cys Ala Glu Ala

50 55 60

Phe Pro Gly Arg Ala Glu Met Glu Ser His Lys Arg Ala His Cys His

65 70 75 80

Leu Cys Gly Gln Arg Phe Asn Arg Asn Gly His Leu Lys Phe His Ile

85 90 95

Gln Arg Leu His Leu Asn Ser Asp Asp Glu Thr Leu Ala Thr Leu His

100 105 110

Thr Ala Leu Gln Ser Ser His Gly Val Leu

115 120

<210> 13
<211> 34
<212> PRT
<213> CHICK

<400> 13

Asp	Tyr	Val	Thr	Leu	Gln	Asp	Leu	His	Ser	His	Val	Tyr	Arg	Glu	Ser
1				5					10					15	
Arg	Asn	Gly	Glu	Ser	Gln	Glu	Ser	His	Gln	Ile	Met	Glu	Asp	Gln	Gly
			20					25						30	

Gln Ala

<210> 14
<211> 11
<212> PRT
<213> Rat

<400> 14

Val	Ser	Ser	Val	Ile	Glu	Glu	Glu	Phe	Asn	Thr
1				5					10	